

ArcView R/3 Interface Readme.pdf

The ArcView R/3 Interface enables ArcView GIS to communicate with the Material Management (MM) and Plant Maintenance (PM) modules of SAP R/3. This document describes the built-in functionality of the interface, and how to use each menu option. The ArcView R/3 Interface can also be customized and extended to work with other R/3 modules, and to present more options to the user within ArcView GIS.

Notes:

- ArcView GIS Version 3.1 or higher, and SAP version 3.0d or higher must be installed on your computer before you install the interface. If you have some part of Microsoft Visual Studio 6.0 installed (e.g., Visual Basic 6.0), make sure you install Service Pack 2 for Visual Studio 6.0. Visual Studio 6.0 installs a bad Windows DLL that causes memory errors in one of the included DLLs of this application.
- Do not issue transaction codes in the OK-CODE field of the R/3 GUI. If this occurs and the new transaction “kills” the previous one, the ArcView project will receive and report an error and it will reconnect to R/3. The ArcView project will reconnect to R/3 every time an ArcView initiated R/3 transaction fails.
- Refer to esri_r3.pdf for information on the exposed functions of the included esri_r3.dll.

To Start: Open the supplied ArcView project file (avir3.apr).

Two sample themes are provided for testing the interface. The themes are ‘Materials’ and ‘Equipment’.

The equipment shapefile has equipment records with R/3 equipment numbers 1 through 5. Your R/3 instance may not have these equipment numbers. To synchronize the equipment shapefile with records in R/3, create an equipment record in R/3 for each point in the shapefile. Refer to the task ‘To create a equipment record in R/3’ below, or alternatively, you can edit the equipment.dbf file in ArcView and reassign R/3 equipment numbers from your R/3 instance.

Similarly, the material shapefile has material records with R/3 material numbers 1 through 8. Your R/3 instance may not have these material numbers. To synchronize the material shapefile with records in R/3, create a material record in R/3 for each point in the shapefile. Refer to the task ‘To create an material record in R/3’ below, or alternatively, you can edit the material.dbf file in ArcView and reassign R/3 material numbers from your R/3 instance.

To connect to and disconnect from R/3: Open the “Sample View” in the Views collection. When the view is active, the menu will have an “SAP R/3 Interface” item. There are sub-menus in this item with the first one being “Login”. The rest will be grayed out until the user is connected to an R/3 system. To connect, select the “Login” sub-menu. Upon entering a correct username and password, the R/3 GUI splash screen

will appear. Once the connection is successful, the rest of the sub-menu items are active and the “Login” sub-menu is replaced with “Logout”. Note however that the R/3 GUI is invisible at this point (this is normal). Use “Logout” to disconnect from R/3.

To create a material record in R/3: Select “Create Record” under “Materials Master” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the material object for which you would like to create a record, making sure the “Material” theme is selected in the sample view. Upon selecting the material object, the R/3 GUI is activated and displays the Create Material record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel it by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. The new material number, if any, is associated to the material object that was previously selected. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To change a material record in R/3: Select “Change Record” under “Materials Master” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the material object for which you would like to change a record, making sure that the “Material” theme is selected in the sample view. Upon selecting the material object, the material number is passed to R/3 and the R/3 GUI is activated and displays the Change Material record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel it by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To display a material record in R/3: Select “Display Record” under “Materials Master” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the material object for which you would like to display a record, making sure the “Material” theme is selected in the sample view. Upon selecting the material object, the material number is passed to R/3 and the R/3 GUI is activated and displays the Display Material record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel it by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To find a material in R/3 by matchcode: Select “Find by Matchcode” under “Materials Master” in the “SAP R/3 Interface” menu. Upon selecting the menu, the R/3 GUI is activated and displays the Find Material by Matchcode transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel it by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To find a material in R/3 by classes: Select “Find In Classes” under “Materials Master” in the “SAP R/3 Interface” menu. Upon selecting the menu, the R/3 GUI is activated and displays the Find Material by Classes transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To create an equipment record in R/3: Select “Create Record” under “Plant Maintenance” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the equipment object for which you would like to create a record, making sure the “Equipment” theme is selected in the sample view. Upon selecting the equipment object, the R/3 GUI is activated and displays the Create Equipment Record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. The new equipment number, if any, is associated to the equipment object that was previously selected. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To change an equipment record in R/3: Select “Change Record” under “Plant Maintenance” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the equipment object for which you would like to change a record, making sure the “Equipment” theme is selected in the sample view. Upon selecting the equipment object, the equipment number is passed to R/3 and the R/3 GUI is activated and displays the Change Equipment Record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To display an equipment record in R/3: Select “Display Record” under “Plant Maintenance” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the equipment object for which you would like to display a record, making sure the “Equipment” theme is selected in the sample view. Upon selecting the equipment object, the equipment number is passed to R/3 and the R/3 GUI is activated and displays the Display Equipment Record transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.

To create a service notification in R/3 for an equipment record: Select “Maintenance Notification” under “Plant Maintenance” in the “SAP R/3 Interface” menu. Then with the “cross-hair” mouse pointer, identify the equipment object for which you would like to

create a notification, making sure the “Equipment” theme is selected in the sample view. Upon selecting the equipment object, the equipment number is passed to R/3 and the R/3 GUI is activated and displays the Create Service Notification transaction. At this point the control is in the R/3 GUI and ArcView is waiting (with an hour glass icon) for the transaction to finish. Finish the transaction in the R/3 GUI or cancel by selecting the Back or Cancel keys. After the transaction is finished or canceled, the control goes back to ArcView. At this point the R/3 GUI is waiting (with an hour glass icon) for instructions from ArcView.